B2 cont

magnets 11, altogether over between approximately 15% and 20% of the circle, to be precise, in uniform webs. In this way, there is sufficient fiber-reinforced plastic 12 between the mechanically very rigid permanent magnets 11 for the rotor 1 to be stable, and a rotor 1 with the smallest possible mass moment of inertia is achieved with the greatest economy, in terms of production cost.

IN THE CLAIMS:

Replace the indicated claims with:

B3

1. (Twice Amended) An electric axial flow machine including an ironless disk-shaped rotor arranged on a machine shaft and having permanent magnets embedded in a fiber- or fabric-reinforced plastic, and, on both sides, next to the rotor, a stator, wherein the permanent magnets are each embedded in and joined at least peripherally to the fiber- or fabric-reinforced plastic so that the permanent magnets and the machine shaft form a dimensionally stable unit.

2. (Twice Amended) The electric axial flow machine as claimed in claim 1, wherein the permanent magnets are arranged circumferentially, in a circle, around the machine shaft and the fiber- or fabric-reinforced plastic extends between the permanent magnets over at least 10% of the circle.

3. (Twice Amended) The electric axial flow machine as claimed in claim 1, wherein the rotor has on an outer circumference, or proximate the outer circumference, a stiffening band comprising preimpregnated fibrous material, the rotor becoming thicker with increasing distance from the machine shaft.

B4

7. (Twice Amended) The electric axial flow machine as claimed in claim 1, wherein the stator comprises an annular yoke including slots extending approximately radially, relative to the machine shaft, and through which multi-phase windings pass.

8. (Twice Amended) The electric axial flow machine as claimed in claim 7, wherein the permanent magnets are obliquely arranged, relative to radii of the machine shaft, along a circumferential direction.

B5

10. (Twice Amended) A method for producing an ironless disk-shaped rotor for arrangement on a machine shaft of an electric axial flow machine and having permanent magnets embedded in a fiber- or fabric-reinforced plastic, including placing the machine shaft and the permanent magnets in a mold, heating the mold, and injecting a pre-heated fiber- or fabric-reinforced plastic under pressure into the heated mold to embed the permanent magnets in the fiber- or fabric-reinforced plastic.

11. (Twice Amended) The method as claimed in claim 10, including injecting the fiber- or fabric-reinforced plastic at a temperature of at least 200°C and under a pressure of 500 - 1500 bar.

Add the following claims:

B6

12. (New) The electric axial flow machine as claimed in claim 7, wherein the slots are obliquely arranged, relative to radii of the machine shaft, along a circumferential direction.